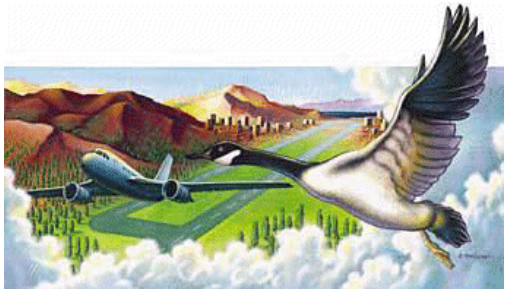
Wildlife Hazard Management



The Wisconsin Airport Owner's Perspective

January, 2003

Deer hazards

Airports should have a "zero tolerance" policy for deer and other large mammals in the aircraft operating area because of their extreme threat to aviation safety. There are no easy all-encompassing solutions to dealing with deer. The best, and most costly option for excluding deer is a permanent 10-foot high chain-link fence. If fencing is not an option, harvesting of the deer is the best procedure for removing them. Although this is not always the most popular option, it is the most effective.

Any deer removal initiatives must be coordinated with environmental authorities and local community representatives.

Airport responsibilities

- Monitor the deer activity at the airport and report and record numbers and aircraft /deer incidents to the airport governing body.
- File NOTAMs, as appropriate, during peak periods of deer activity and add to ATIS if appropriate.
- Patrol the airport regularly during peak periods, early morning and evenings, and use harassment techniques to remove deer from operational areas.
- Remove dense stands of trees and undergrowth on airport property to eliminate cover and allow for visual inspection and access to these areas.

Reporting wildlife strikes

The FAA has a standard form (FAA Form 5200-7) for the voluntary reporting of bird and other wildlife strikes with aircraft. To improve the ease of reporting, strikes can also be reported via the Internet at **http://wildlife.pr.erau.edu/strikeform/birdstrikeform.html**.

Strikes should be reported by airport personnel, pilots or anyone who has knowledge of the strike. It is important to include as much information as possible on FAA Form 5200-7. The identification of the species of wildlife struck is particularly important. Bird strike remains that can not be identified can be identified by a local biologist or by sending feather remains in a sealed bag with FAA Form 5200-7 to:

Federal Aviation Administration
Office of Airport Safety & Standards
AAS-310
800 Independence Avenue, SW
Washington, DC 20591

For more information on developing a program to reduce wildlife hazards, contact the Wisconsin Bureau of Aeronautics at the address shown below, the U.S. Department of Agriculture at (608) 837-2727 or the Federal Aviation Administration at (847) 294-7272 or **http://wildlife-mitigation.tc.faa.gov/public_html/index.html**.

Wisconsin Bureau of Aeronautics
P.O. Box 7914
Madison, WI 53707-7914
(608) 266-3351
www.dot.wisconsin.gov

Wildlife strike statistics

Understanding when and where most wildlife strikes occur is important for the safety of aircraft pilots and passengers. The following information provides an overview of the nature and magnitude of the problem.

- From 1990 to 1998, 22,935 strikes (average of 2,548/year) were reported to the FAA.
- Birds were involved in 97% of the reported strikes with gulls, raptors, blackbirds, waterfowl and doves being the most common.
- Most bird strikes (50%) occurred in the four months between July and October.
- 66% of the bird strikes occurred during the day.
- 55% of bird strikes occurred when the aircraft was on approach or during the landing roll.
- 39% of bird strikes occurred during takeoff and climb.
- About 40% of bird strikes occurred when the aircraft was on the ground.
- 78% of all strikes occurred under 1,000' AGL.
- Mammals were involved in 3% of all wildlife strikes.
- The greatest percentage (31%) of mammal strikes occurred during October - November.
- 60% of mammal strikes occurred when the aircraft was on approach or landing.
- 34% of mammal strikes occurred during takeoff.
- 61% of mammal strikes occurred at night.

Airport owner activities

Wildlife strikes can cause serious damage to aircraft and occasional loss of human life. Because most strikes occur on or near airports, airports are the logical place to address the problem. All wildlife on airports are potential hazards to pilots and aircraft safety. Airport owners need to be aware of wildlife hazards on their airports and take appropriate actions.

Wildlife control management

Wildlife can be controlled by several methods:

- Maintaining the airport land so that it does not attract wildlife.
- Excluding wildlife by fencing or other means.
- Dispersing wildlife from the airport premises.
- Removing wildlife, either dead or alive.

Managing the airport habitat is the best long-term solution for wildlife control. This also includes habitats and land uses near the airport, such as wetlands, waste disposal sites and wildlife refuges. Such land uses and activities are often incompatible with aviation safety and should be prohibited near airports or designed and operated to minimize the attraction of wildlife.

We must caution that it is impossible to control wildlife completely in this way as different species are attracted or repelled by different things. In many situations, active removal or dispersal of wildlife by airport personnel is necessary.

Bird hazards

Birds are drawn to open, short grass areas where they can find security from predators and humans, find a place to nest and rest, and have access to food and water. Airports usually handle bird problems with dispersal techniques but problems will continue if shelter, food and water remain available. Modifying their habitat is the key to permanently reducing the number of birds on the airport.

Habitat modification

- Do not use trees, shrubs and foliage that bear fruit or a large amount of seeds on the airport.
- Space trees 30-50 feet apart to avoid dense cover for roosting and nesting.
- Remove or thin branches of existing trees to eliminate the desired cover and allow for visual inspection of areas.
- Use a vegetation cover and mowing schedule to minimize activity. Studies show that a grass height of 6-10 inches will lessen bird use.
- Prohibit agricultural crops such as cereal grains on leased airport areas.
- Eliminate all standing water to the greatest extent possible. Depressions should be filled and open ditches, retention ponds and wetland sites should not be created.
- Modify structures to reduce nesting areas.
- Work with local authorities to discourage and prevent incompatible land uses from approach areas
- Use propane cannons and other audio repellents and reinforce with occasional harassment and harvesting.